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A collection of Italian salticids (Araneae), mainly from the Tuscan-Emilian Apennines

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A collection of Italian salticids (Araneae), mainly from the Tuscan-Emilian Apennines. - In all, 43 species of 20 different genera have been identified. Various species are rare, *Philaeus bilineatus* is new to Italian fauna, and one species of the genus *Aelurillus* is probably new to science.

Key-words: Araneida - Salticidae - Italian fauna - distribution.

INTRODUCTION

The recent establishment of a Regional Park has lead in the period 1992-1995 to a series of arachnological surveys of the upper Tuscan-Emilian Apennines (Central Italy). In addition to the two faces of the Apennine ridge (The Po valley and the Tyrrenian), the surveys also covered other, mainly hilly, areas of Emilia, and, marginally, other parts of Italy. We feel that it is useful to report the first results of the surveys, wich already effectively contribute to the knowledge of Italian Salticidae.

MATERIALS AND METHODS

Surveys were mainly conducted in grass land of the plain and the slopes, on mountain pastures, in the low and dry vegetation typical of temperate climates, among trees and shrubs, and on stony and bare ground. As some species are believed to be synantropic, the walls and gardens of dwellings were also included among the habitats studied. The results also include a series of previously unpublished data collected mainly in the Val d'Aosta by an amateur arachnologist in the period 1930-40 (P. Tongiorgi collection: coll. PT). The altitude is specified only for collecting sites which are at elevation higher than 200 m a.s.l.

Localities abbreviation: AO, Aosta; FE, Ferrara; GR, Grosseto; IM, Imperia; LI, Livorno; LU, Lucca; MO, Modena; NU, Nuoro; PI, Pisa; PT, Pistoia; RE, Reggio Emilia; TO, Torino.

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RESULTS

In all, 43 species of 20 genera were recorded, a satisfactory result given the total number of 136 species of 33 genera so far identified in Italy as a whole (PESARINI 1995). The material collected includes one species (*Philaeus bilineatus*) found for the first time in Italy, and a further one of the genus *Aelurillus*, wich apparently differs from all descriptions in the literature and is therefore probably new for science.

Aelurillus v-insignitus (Clerck, 1758)

Cà de Carli, Scandiano (RE), 600 m, 15.V.1993, 1 ♂, 1 ♀, Castiglione di Garfagnana (LU), 590 m, 30.V.1994, 1 ♂, 1 ♀, Torino 650 m, 29.V.1936 (coll. PT), Aosta, 720 m, 6.VIII.1936; 17.IV.1938 (coll. PT), Val d'Ayas, 1950 m, 8.VIII.1939 (coll. PT).

An extremely widespread species in Italy. The specimens studied were found in hilly regions on dry ground.

Aelurillus sp.

Castro (LE), VII. 1994, 1 ♀.

The female specimen found in Apulia apparently differs from all known species of the genus.

Ballus depressus (Walckenaer, 1802)

Fonti di Poiano, Castelnovo Monti (RE) 480 m, 18. V. 1992, 1 ♂.

A very widespread species in Italy. The specimen studied was found among reeds on the edge of a pond.

Bianor albobimaculatus (Lucas, 1846)

Sardegna, Pinarello, 2 ♀♀.

An essentially Mediterranean species limited in Italy to the larger Islands. The specimens studied came from a damp area.

Carrhotus xanthogramma (Walckenaer, 1825)

Bianello, Quattro Castella (RE), 280 m, 27.IV.1994, 3 ♂♂; Ceredolo dei Coppi (RE), 570 m., 10.V.1994, 2 ♂♂.

A relatively rare species in Italy. Our specimens were found in hilly regions among shrubbery.

Chalcoscirtus infimus (Simon, 1868)

Castiglione di Garfagnana (LU), 590 m, 30. V. 1994, 1 ♂; Quercianella (LI), 1. VI. 1995, 1 ♂.

A very widespread species throughout the country. The specimens were found on bare ground and among herbaceous vegetation.

Cyrba algerina (Lucas, 1846)

Montemoro (RE), 550 m, 27. V. 1992, 2 ♀♀.

A species unknown in northern Italy, but reported from Liguria, and not very widespread in the rest of the country. The specimens studied were from a dry slope of the Apennines without trees or shrubs.

Eris nidicolens (Walckenaer, 1802)
(*Macaroeris nidicolens* according to WUNDERLICH 1991)
Salvarano (RE), 360 m, 15. VII. 1993, 2 ♂♂.

A widespread species throughout the country. The specimens were found in their silky refuge among the pine-needles of *Pinus nigra*.

Evarcha arcuata (Clerck, 1758)
Cà de Carli, Scandiano (RE), 600 m, 15.V.1993, 1♂, Ceredolo dei Coppi (RE), 570 m, 10.V.1994, 1 ♀, Pian del Monte, Villaminozzo (RE), 1200 m, 6.VIII.1993, 1 ♂.

A very widespread species throughout the country. The specimens were found among shrubby vegetation.

Evarcha falcata (Clerck, 1758)
Toano (RE), 850 m, 29.V.1993, 1 ♀; Pian Vallese, Villaminozzo (RE), 1300 m, 2.VIII.1993, 2 ♂♂; Cà del Vento, Albinea (RE), 350 m, 16.VI.1994, 1 ♀; M.te Spicchio, Pievepelago (MO), 1502 m, 25.V.1993, 1 ♀; Bosco di Guara, Riolunato (MO), 1300 m, 19.V.1994, 1 ♀; Rio Borgognoni, Pievepelago (MO), 1565 m, 4.VIII.1994, 1 ♂, 1 ♀; Castiglione di Garfagnana (LU), 565 m, 30.V.1994, 1 ♂.

A ubiquitous, frequent and widespread species in Italy.

Evarcha jucunda (Lucas, 1842)
Ceppaiano (PI), 29. V. 1994, 1 ♂; Pisa, VII. 1995, 1 ♀.

A species present throughout the country. The specimens studied were found on the walls of buildings.

Evarcha laetabunda (C.L. Koch, 1848)
Toano (RE), 850 m, 29.V.1993, 1 ♂; Trinità (RE), 590 m, 23.IV.1993, 1 ♂, 1 ♀; Macigno (RE), 490 m, 1.V.1994, 1 ♂, Castiglione di Garfagnana (LU), 575 m, 30.V.1994, 1 ♂.

A species found to date only in central and northern Italy. It prefers sunny environments, where it is found among vegetation of various types.

Euophrys erratica (Walckenaer, 1825)
Baragalla (RE), 23.IV.1992, 1 ♂; Campotto (FE), 27.IV.1993, 1 ♂; Aosta, 560 m; Valle d'Ayas, 10.IX.1936, 2000 m (coll. PT.)

A largely widespread species in Italy. The specimens studied were found on the ground in grassy environments.

Euophrys frontalis (Walckenaer, 1802)
Campotto (FE), 27. IV. 1993, 1 ♀.

A very widespread species in Italy. The specimens studied were found on shady grassland.

Euophrys petrensis (C.L. Koch, 1837)
Mt. Cimone (MO), 1850 m, 18. VI. 1992, 1 ♂, 3 ♀♀.

A rare species in Italy limited to the northern regions. Our specimens were found in stony areas at high altitude.

Euophrys vafra (Blackwall, 1867)

Modena, II.1993, 1 ♀; 15.III.1993, 2 ♀♀; Baragalla (RE), 23.IV.1992, 1 ♂, 5 ♀♀; Albinea (RE), 200 m, 2.V.1992, 2 ♂♂, 2 ♀♀; Canali (RE), 13.V.1992, 1 ♂; Pisa, 6.III.1993, 5.V.1993, 1.VII. 1993, IX.1994, IV, 1995, 5 ♂♂, 4 ♀♀; Quercianella (LI), 1.VI. 1995, 1 ♂. Castro (LE), VIII. 1995, 2 ♀♀.; Aosta, 700 m, 30.V.1937, 1 ♂ (coll. PT);

A very widespread species throughout the country with marked tendency to sinanthropy.

Heliophanus aeneus (Hahn, 1831)

Foce di Campolino, Abetone (PT), 1700 m, 20.VII.1992, 1 ♂, 1 ♀; M.te Spicchio, Pievepelago (MO), 1550 m, 25.V.1993, 3 ♂♂, 1 ♀; M.te Cusna (RE), 2000 m, 3.VIII.1993, 2 ♂♂; Pian Cavallaro, Mt. Cimone (MO), 1850 m, 28.VII.1994, 1♂; Val di Rhêmes (AO), 1660 m, 4.VIII.1935; Allomonte (AO), 1400-1800 m, 26.VIII.1936; Aosta, 1550 m, 16.VIII.1937; Val d'Ayas (AO), 1870-1950 m, 23.VII.1939 (coll. PT).

A widespread species from Trentino to Calabria. The specimens were found in stony areas and in vaccinium (*Vaccinum myrtillum*) at high altitude.

Heliophanus cupreus (Walckenaer, 1802)

Passo Radici (MO), 1527 m, 16.VII.1992, 1 ♂; M.te Cimone, 1700 m, 27.VII.1992, 1 ♂; Pian del Falco, Sestola (MO), 1200 m, IX. V. 1995, 3 ♀♀; Bosco di Guara, Riolunato (MO), 1300 m, 19.V.1994, 1 ♂, 1 ♀; Canali (RE), 21.IV.1993, 1 ♂; Marola (RE), 804 m, 8.V.1993, 2 ♀♀; Bianello, Quattro Castella (RE), 280 m, 27.IV.1994, 2 ♂♂; Cà del Vento, Albinea (RE), 350 m, 16.VI.1994, 1 ♂; Rondinara (RE), 300 m, XVIII. IV. 1995, 1 ♂; Castiglione di Garfagnana (LU), 590 m, 30.V.1994, 1 ♂; Val d'Aosta: Aosta, 650 m, 17.IV.1938 (coll. PT); Torino, 240 m, 11.V.1936 (coll. PT);

A very common species throughout Italy. Observations showed *H. cupreus* to be a ubiquitous species.

Heliophanus flavipes (Hahn, 1831)

Albinea (RE), 200 m, 2.V.1992, 1 ♂; Cà del Vento, Albinea (RE), 350 m, 16.VI.1994, 1 ♂; Val di Rhêmes (AO), 1660 m, VII-VIII.1935 (coll. PT).

A widespread species throughout the country. The specimens studied were found in herbaceous vegetation and shrubbery.

Heliophanus kochi Simon, 1868

Pian del Falco, Sestola (MO), IX. V. 1995, 1 ♂, Albinea (RE), 200 m, 2.V.1992, 3 ♂♂; Monte Moro (RE), 550 m, 27.V.1992, 1 ♂; Porto Maurizio (IM), 18.VI.1936 (coll. PT); Aosta, 650-700 m, 13.VI.1936; 30.V.1937 (coll. PT); Torino, 7.VI.1935 (coll. PT).

An extremely widespread species in Italy, The specimens studied were found on herbaceous as well bare or stony ground.

Heliophanus lineiventris Simon, 1868

M.te Cimone, 1500-1700 m, 22.VII.1992, 1 ♂; Pian Cavallaro, M.te Cimone (MO), 1850 m, 28.VII.1994, 1 ♀; Val d'Ayas (AO), 2050 ♀, 7.IX.1939, 1 ♀ (coll. PT.).

A species of palearctic distribution, already reported in central-southern Italy. The animals were found in stony areas at high altitude.

Heliophanus tribulosus Simon, 1868

Livorno, 1. VI. 1995, 3 ♂♂, 3 ♀♀; Monti Pisani (PI), 600 m, 1. VI. 1995, 1 ♂.

An abundant species throughout Italy. The specimens studied were found among shrubbery.

Icius hamatus (C.L. Koch, 1846)

Novi (MO), 15.V.1992, 2 ♀♀; Modena, 15.III.1993, 1 ♂; Canali (RE), 13.V.1992, 1 ♂; Pisa, IX.1992, 1 ♂; Torino, 240 m, 5.VI.1935 (coll. PT); Porto Maurizio (IM), 18.V.1937 (coll. PT).

A species present throughout the country. It prefers the plains, where it was found in shrubbery, but also on the walls of buildings.

Icius subinermis Simon, 1937

Novi (MO), 8.VIII.1992, 3 ♂♂; Modena, 20.IX.1994, 1 ♂.

A species reported in central-southern Italy and in larger Islands. *I. subinermis* shows marked synanthropic tendencies.

Marpissa muscosa (Clerck, 1758)

Novi (MO), 15-24.IX.1992, 1 ♂, 1 ♀; Quattro Castella (RE), 23.VIII.1992, 1 ♂; Rossena (RE), 525 m, 7.IX.1994, 1 ♀.

One of the most common and abundant species present throughout the country. It was found in the plain and on slopes and frequently observed on the walls of buildings.

Marpissa nivoyi (Lucas, 1846)

S. Giovanni di Querciola (RE), 600 m, 7. VI. 1994, 1♂.

Rare in Italy and found in central-southern regions. The only specimen was found in herbaceous vegetation on a south-facing slope.

Menemerus semilimbatus (Hahn, 1827)

Novi (MO), 10.VIII.1994, 1 ♀; Modena, 17.IX.1994, 1 ♂; Canali (RE), 13.V.1992, 2 ♂♂, 2 ♀♀; 6.VI.1994, 1 ♂; Pisa, 1.VII.1994, 1 ♀; Torino, VII.1940 (coll. PT).

Common throughout the country. We noted a marked tendency to sinanthropy.

Menemerus taeniatus (L. Koch, 1867)

Rossena (RE), 525 m, 7.IX.1994, 2 ♂♂.

This species, which prefers the hot and dry climate of the Mediterranean, is considered rarer than the related *M. semilimbatus*. The finding in Catania by CANTARELLA (1982) is believed to be the first in Italy. However, the species was previously reported in Corsica (KRAUS 1955), and a number of specimens found at La Spezia and in other unspecified sites of Ligura and Veneto are said to be also present in the Canestrini collection (HANSEN 1986). CANTONI's reported finding in Apulia (1882) needs to be verified. The specimens we studied were captured on the walls of the Guardiola of Rossena, an historical building which stands on a mass of ophiolitic rock. These lava agglomerations are know frequently to create particular micro-

climatic situations, which in this site are testified by the presence of *Opuntia compressa.*

Myrmarachne formicaria (De Geer, 1778)

Canali (RE), 13. V. 1992, 1 ♂.

One of the most common and widespread species in the country. The specimen studied was found on grassland close to a ant-nest.

Pellenes nigrociliatus (Simon, 1875)

Trinità (RE), 590 m, 23.IV.1993, 1 ♂; Cà de Carli, Scandiano (RE), 600 m, 15.V.1993, 1 ♀; Budoni (NU), 8. IX. 1995, 1 ♂.

A thermophilous and stenoecic species, widespread, if uncommon, in Italy.

Pellenes tripunctatus (Walckenaer, 1802)

Pian del Falco, Sestola (MO), 1200 m, 9. V. 1995, 1 ♂; Casalgrande (RE), 250 m, 3. VII. 1993, 2 ♀♀.

A very widespread but uncommon species in Italy which lives in the stony ground and reedy areas (*Phragmites* sp.).

Philaeus bilineatus (Walckenaer, 1826)

Trinità (RE), 600 m, 12.VII.1994, 1 ♀.

Proszynski (1971) compared *P. bilineatus* to *P. chrysops* on the basis of the female reproductive apparatus, which does appear to be similar. He considers *P. bilineatus* to be a relatively rare chromatic phenotype of *P. chrysops*, pointing out that an adult male *bilineatus* has yet to be described, although sub-adult males of this phenotype, which present two, very evident light bands on the opisthosoma, have been reported. However, similarity in the reproductive apparatus is not always decisive in establishing synonymy, and there are cases, such as *Ballus* (Alicata & Cantarella, 1987), in which the chromatic model is discriminatory.

The specimens attributed here to *bilineatus* differ from *chrysops* for various reasons: 1) the female presents two, very evident light bands on the opisthosoma; 2) the female and the two males (Museum of Natural History of Paris numbered 3697 and 746) have an anterio-lateral furrow on the prosoma formed by the slightly raised intersection of a brief series of bristles and hardly evident in the *chrysops*; 3) the prosoma of the males is uniformly dark and without the post-ocular bands of light scales seen in the specimens of *chrysops* found in the same area and in other regions of Italy; 4) the males' very dark pedipalps are trimmed with white bristles, but do not present the yellow bristles seen in *chrysops*; 5) in the males, the dark furrow on the opisthosoma presents an elongated mark at the centre of the basal half comprising light bristles; and 6) in the specimens conserved in alcohol, the scales covering the opisthosoma to the side of the dark band are yellowish-orange (reddish in *chrysops*). Other subtle but significant differences with respect to *chrysops* are evident in the morphology of the male palp: in ventral section, the alveolus of the tarsus is notably smaller and the tarsus has an apical portion (in front of the alveolus) which is longer

and less restricted at the apex, while the basal portion is substantially narrower. Furthermore, the basal part of the bulb is smaller, and the posterior lobe is more tapered and much more angled at the base. The limited number of specimens available does not allow any definitive conclusions to be drawn, but prior to a more extensive study, we feel that the name *P. bilineatus* should be maintained to describe this phenotype, so making it possible to record its distribution and, in the final analysis, resolve the problem of the relationship between the two forms.

The specimen was found in a hilly location on the branch of small *Prunus spinosa* in full sunlight.

Philaeus chrysops (Poda, 1761)

Novi (MO), 15.V.1992, 1 ♂; Canali (RE), 13.V.1992, 2 ♂♂, 1 ♀, 1-10.VII 1992, 1 ♀; Monte Moro (RE), 550 m, 27.V.1992, 1 ♂; Grassano (RE), 500 m, 4.V.1993, 1 ♀; Macigno (RE), 490 m, 4.V.1994, 1 ♂; S. Giovanni di Querciola (RE), 600 m, 7.VI.1994, 1 ♂; Porto Maurizio (IM), 18.V.1936 (coll. PT).

This is probably the most common species in Italy. Specimens were found in most of the environments studied.

Phlegra bresnieri (Lucas, 1846)

Baragalla (RE), 23.V.1992, 1 ♂; Albinea (RE), 200 m, 2.V.1992, 2 ♂♂, 2 ♀♀; Trinità (RE), 590 m, 23.IV.1993, 1 ♀; Castiglione di Garfagnana (LU), 565 m, 30.V.1994, 1 ♂; Porto Maurizio (IM), 18.V.1936 (coll. PT).

Species present throughout Italy. It appears to prefer stony areas.

Phlegra fasciata (Hahn, 1826)

M.te Cimone, 1500-1700 m, 22. VII. 1992, 1♂; Noasca (TO), 1400 m, 21. VI. 1995, 1 ♂, 1♀.

Species present throughout the country. Specimens were found on the ground in mountain pasture land and on a path.

Saitis barbipes (Simon, 1868)

Marola (RE), 804 m, 8.V.1993, 2 ♂♂; Civago (RE), 1100 m, 7. V. 1995, 1 ♂; Castiglione di Garfagnana (LU), 570 m, 30.V.1994, 3 ♂♂; Pisa, 10. VI. 1995, 1 ♂; Torino, 650-700 m, 9.VI.1936 (coll. PT); Val Susa (TO), 550-600 m, 16.VI.1936 (coll. PT); Porto Maurizio (IM), 18.V.1936 (coll. PT).

A very widespread species in Italy. It appears to prefer the chestnut woods (*Castanea sativa*).

Salticus cingulatus (Panzer, 1797)

Campotto (FE), 27. IV. 1993, 1 ♂.

A localized and not very widespread species. The specimen was found on a fence on the edge of a pond.

Salticus mutabilis Lucas, 1846

Pisa, 24.VI.1992; VI.1993; 5.V.1994, 2 ♂♂, 3♀♀; Ceppaiano (PI), 29.V.1994, 2 ♀♀; Porto Maurizio (IM), 18.V.1936 (coll. PT).

In Italy, *S. mutabilis* is limited to southern regions. The animals were found only on the walls of buildings.

Salticus scenicus (Clerck, 1757)

Toano (RE), 850 m, 29.V.1993, 1 ♂; Pisa, 5.V.1994, 3 ♂♂; Ceppaiano (PI), 29.V.1994, 2 ♂♂; Aosta, 650-700 m, 13.VI.1936; Allomont (AO), 1950 m, 1.IX.1936; Val di Rhemes (AO), 1660 m, VII-VIII. 1935 (coll. PT).

A very widespread and abundant species in Italy. Specimens found on the walls of buildings and in stony areas.

Salticus unciger (Simon, 1868)

Novi (MO), 15.V.1992; 20.V.1993; 19.VI.1994; 10.VIII.1994, 1 ♂, 4 ♀♀; Pisa, 1.V.1994, 3 ♂♂; Quercianella (LI), 1. VI. 1995, 1♂.

A no very widespread species in Italy, found, in the main, on the walls of buildings.

Salticus zebraneus (C. L. Koch, 1837)

Isola di Montecristo (GR), 1. VI. 1993, 1 ♀.

S. zebraneus is not very common, but is found throughout the country.

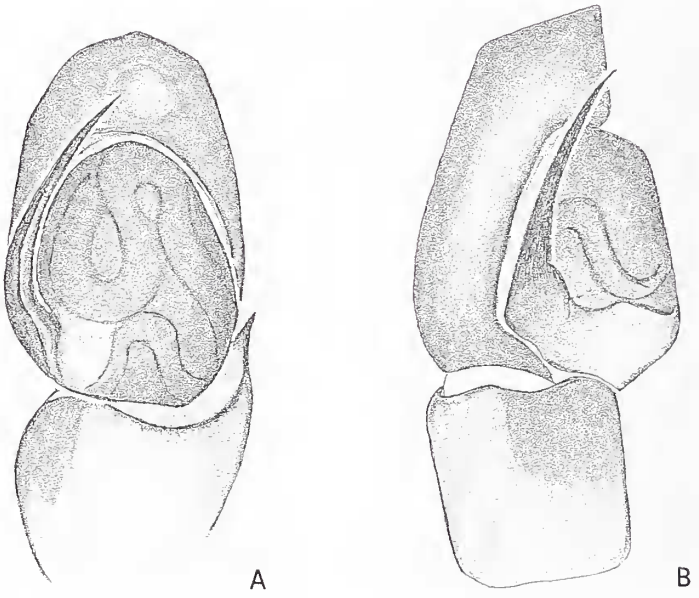

FIG. 1

Sitticus distinguendus, male palp. A, ventral vision; B, lateral vision.

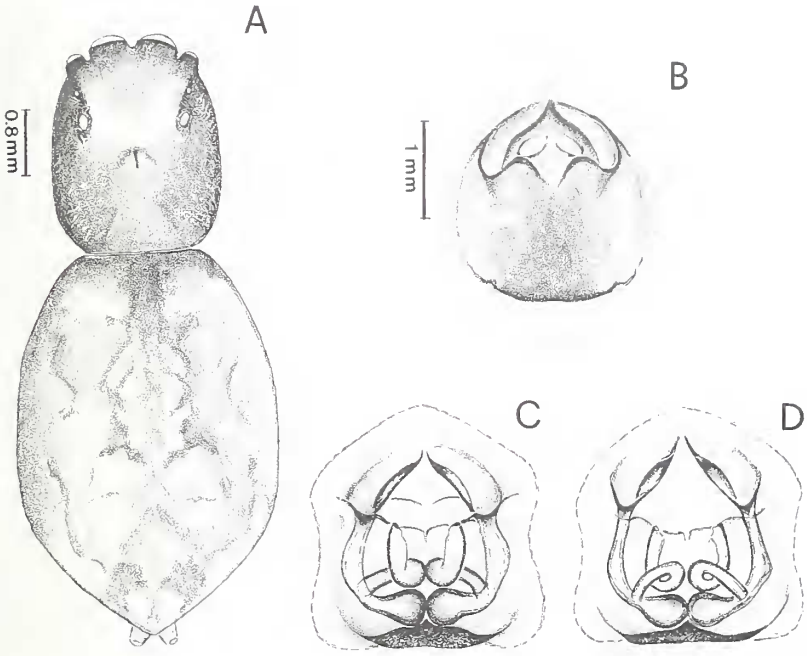

FIG. 2

Sitticus cfr *longipes*. A, habitus of the female; B, epigyne, C and D, vulva in ventral and dorsal vision.

Sitticus distinguendus (Simon, 1868)

M.te Cimone, 1600 m, 22. VII. 1992, 1 ♂.

The only specimen of *S. distinguendus* was found on stony ground at the edge of a path (Fig. 1A, B). Previously reported only in Val di Solda (KULCZYSKI 1887) and by Canestrini in the Veneto region (1875, cfr. HANSEN 1986), this is the first finding of the species in central Italy. The genus *Sitticus* presents considerable taxonomic difficulties, given the limited differences between species, the intraspecific variability and the large number of synonyms. Indeed, different authors, and occasionally even the same author, have often described and reported specimens of the same species under different names. Identification of the *Sitticus* found in the Modena Apennines is primarily based on the descriptions and figures by SIMON (1937, *Attulus helveolus*), TULLGREN (1944, *Attulus cinereus*) and HARM (1973, *Sitticus helveolus*).

Sitticus cfr **longipes** (Canestrini, 1873)

Fenestrelle (TO), 2500 m, 3. VIII. 1995, 1♂; Parco Nazionale del Gran Paradiso: Ceresole Reale (TO), 2000 m, 16.VI.1993, 1 ♀, Chiapili di Sopra (TO), 2500 m, 19.VI.1995, 2 ♀♀; Noasca (TO), 2200 m, 19. VI. 1995, 1♂.

Albeit with some reservation, we assign the three females found in the Gran Paradiso National Park to this species. The vulva closely resembles that of *S. longipes* (cfr. PROSZYNSKI 1971*a*, 1991; HANSEN 1986), although an exact comparison is difficult given the poorness of the iconography. The similarity of the epigynes is less clear-cut; as there is no evidence of the median furrow which is clearly shown in the current iconography of *S. longipes* (cfr. SIMON 1937; PROSZYNSKI 1973, 1976, 1991). There is a closer similarity to the epigyne of de LESSERT (1910, fig. 242). Some similarity to the genitalia of *S. saxicola* (cfr. PROSZYNSKI 1971*a*, 1991; HARM 1973) and *S. lineolatus* (PROSZYNSKI 1971*a*) is apparent. The habitus is like that shown in PROSZYNSKI (1973, fig. 50), but there is no trace of the characteristic median lanceolate area of white bristles on the carapace. Total length (1 female) 6.5 mm, length of cephalothorax 2.4 mm, breadth 2 mm. Epigyne Fig. 2B, vulva Figs 2C and D.

In Italy *S. longipes* has only been reported in the Alps. The specimens studied were found in stony areas with little or no herbaceous vegetation..

BIO-GEOGRAPHIC AND ECOLOGICAL OBSERVATIONS

Only two of the species studied may be considered holarctic: *Euophrys erratica* and *Salticus scenicus*. The palearctic group is larger and includes *Aelurillus v-insignitus*, *Carrhotus xanthogramma*, *Evarcha arcuata*, *E. falcata*, *E. laetabunda*, *Euophrys frontalis*, *Heliophanus aeneus*, *H. flavipes*, *H. kochi*, *H. lineiventris*, *Myrmarachne formicaria*, *Pellenes tripunctatus*, *Philaeus chrysops*, *Phlegra fasciata*, *Salticus zebraneus*. The species with an European or southern European distribution are equally numerous. The former group includes *Ballus depressus* (which also extends to northern Africa), *Euophrys petrensis*, *Heliophanus tribulosus* (also in western and central Asia), *Marpissa muscosa* (also in Japan), *Philaeus bilineatus*, *Salticus mutabilis* (also typical of western Asia and the Azores) and *Sitticus distinguendus*, while the species distributed in southern Europe include *Chalcoscirtus infimus*, *Eris nidicolens*, *Euophrys vafra* (which extends as far as the Azores, Tunisia and Syria), *Marpissa nivoyi* (spreading as far as north Africa), *Pellenes nigrociliatus* (also in Japan) and *Phlegra bresnieri*, *Salticus muciger*, *Sitticus longipes* (found only in the Alps). A small group of species are of Euro-Siberian distribution (*Heliophanus cupreus* and *Salticus cingulatus*). Those of an essentially Mediterranean distribution are: *Biantor albobimaculatus* (also found in northern Africa), *Cyrba algerina* (widespread as far as tropical Africa and India), *Evarcha jucunda*, *Icius hamatus*, *I. subinermis*, *Menemerus semilimbatus* and *M. taeniatus* (both also reported from Argentina) and *Saitis barbipes*.

Nineteen species (*Aelurillus v-insignitus*, *Ballus depressus*, *Eris nidicolens*, *Evarcha falcata*, *E. jucunda*, *Euophrys erratica*, *E. frontalis*, *E. vafra*, *Heliophanus cupreus*, *H. flavipes*, *H. kochi*, *Pellenes nigrociliatus*, *Philaeus chrysops*, *Phlegra bresnieri*, *Saitis barbipes*, *Salticus cingulatus*, *S. scenicus*, *S. muciger*, *S. zebraneus*) are distributed more or less abundantly from the plain to the mountain areas. *Heliophanus tribulosus*, *Icius hamatus*, *I. subinermis*, *Marpissa muscosa*, *M. nivoyi*,

Menemerus semilimbatus, *M. taeniatus*, *Salticus mutabilis* and *Myrmarachne formicaria* are usually limited to the plain, although they can be found at low and middle altitudes. A sizable group, 7 of the 43 species studied, is colonizing mountain environment and can even be found above 2500 m a.s.l.. The group includes: *Euophrys petrensis*, particularly rare in Italy, *Heliophanus aeneus*, *H. lineiventris*, *Phlegra fasciata*, *Sitticus distinguendus*, *S. longipes*, *Chalcoscirtus infimus*, *Evarcha arcuata* and *E. laetabunda*, the latter three, occasionally also found at lower altitudes (about 500 m a.s.l.).

Most of the species prefer sunny, dry habitats, but there are some which prefer shaded (*Ballus depressus* and *Evarcha arcuata*) or damp (*Bianor albobimaculatus*, *Salticus cingulatus* and, more rarely, *Heliophanus cupreus*) sites. Certain species, such as *Menemerus semilimbatus* and *Euophrys vafra*, could be defined, albeit approximately, as synantropic, as they are occasionally found in and on dwellings, buildings, walls around houses etc. Given the number of findings reported in the literature, *Philaeus chrysops* is beyond doubt the most common species in Italy, and is indeed that which is most frequently sighted. *Salticus scenicus*, *Heliophanus cupreus*, *H. flavipes* and *Menemerus semilimbatus* are also very common. The relatively common species include *Evarcha jucunda*, *Euophrys erratica*, *E. vafra*, *Heliophanus kochi*, *Icius hamatus* and *Marpissa muscosa*, while *Pellenes nigrociliatus*, *Marpissa nivoyi*, *Menemerus taeniatus*, *Evarcha laetabunda* and *Euophrys petrensis* are decidedly rare.

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